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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,062	02/25/2004	Kazunori Yasuda	81880.0115	9539

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EXAMINER

MILLER, CHERYL L

ART UNIT	PAPER NUMBER
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3738

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/787,062

Applicant(s)

YASUDA ET AL.

Examiner

Cheryl Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/28/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-3 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. The claims recites the phrases inner sliding surface, outer sliding surface, front side and rear side. The proper terminology in field of art in the United States is *medial* sliding (or bearing) surface, *lateral* sliding (or bearing) surface, *anterior*, and *posterior*. It is suggested to change all recitations of inner to medial, outer to lateral, front to anterior, and rear to posterior.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Otto et al. (US 2004/0243244 A1). Referring to claim 1, Otto discloses an artificial knee joint (see figs.4-11, 23-24) comprising a femoral component (200) and a tibial component (400), the tibial component having an inner/medial sliding surface (440) having a circular arc shape in the front and rear (anterior and posterior) extending in the anterior posterior direction (seen clearly in

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fig.4), and an outer/lateral sliding surface (442) having a circular arc shape in the front (anterior) and linear in the rear (posterior) in the anterior posterior direction (straight slope, see fig.4; P0103, P0105).

Referring to claim 2, Otto has shown in figs.4-11, an inner/medial sliding surface (440) that seemingly has a linear shape in the middle of the surface extending in the anterior posterior direction (also referred to as a sagittal plane).

Referring to claim 3, Otto has shown in figs.1, 3, and 12, an outer/lateral sliding surface (442) having a circular arc orthogonal to the front and rear (otherwise referred to as a coronal or frontal plane) that gradually increases in curvature from anterior to posterior, which is seemingly shown in the figures.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

In the alternative to the above rejection, claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otto et al. (US 2004/0243244 A1) in view of Roger (US 5,935,173). Otto discloses a knee joint substantially as claimed (see above). Otto discloses a tibial component (400) having an outer/lateral sliding surface (442) that is circular on the anterior end and linear on the posterior end (fig.4). Otto also has shown an inner/medial sliding surface (440) that appears in the figures (fig.4-11) to be circular on the anterior and posterior ends and linear in the center, however Otto is silent to recite and exact curvatures for the inner/medial sliding

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surface. Roger teaches in the same field of knee joints, a tibial component having an inner/medial sliding surface (21) with two circular ends (22, 23) with *a linear segment* (24) inbetween, for the purpose of allowing *better congruency with the femoral component through the full range of flexion and extension* (col.5, lines 5-32). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Otto's tibial component with the seemingly claimed curvature seen in Otto's figures, with Roger's teaching of specific curvatures, particularly a linear segment inbetween two curves, in order to provide a sliding surface having better congruency with the femoral component through the full range of flexion and extension.

In the alternative to the above rejections, claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roger (US 5,935,173) in view of Otto et al. (US 2004/0243244 A1). Roger discloses an artificial knee joint (10) comprising a femoral component (11) and a tibial component (13; see fig.5), the tibial component having an inner/medial sliding surface (21) and an outer/lateral sliding surface (other 21) each having circular arc from anterior to posterior (and a mid linear segment; col.5, lines 5-32). Roger does not however disclose the outer/lateral sliding surface to have a rear/posterior linearity. Otto teaches in the same field of artificial knee joints, modification of the *outer/lateral* sliding surface (442) to have a rear/posterior linearity (straight slope, P0103, fig.4) in order to provide the advantage of increase movement/rotation (P0103). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Roger's tibial component having two sliding surfaces that are curved, with Otto's teaching of modifying the outer/lateral sliding surface to have a rear linearity, in order to provide a tibial component having increased movement/rotation.


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Miller whose telephone number is (571) 272-4755. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4755. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cheryl Miller



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PRIMARY EXAMINER